

[11] Patent Number: 5,408,258

## Kolessar

[45] **Date of Patent:** Apr. 18, 1995

**[54] METHOD OF AUTOMATICALLY  
QUALIFYING A SIGNAL REPRODUCTION  
DEVICE FOR INSTALLATION OF  
MONITORING EQUIPMENT**

[75] Inventor: **Ronald S. Kolessar**, Columbia, Md.

[73] Assignee: **The Arbitron Company, Columbia, Md.**

[21] Appl. No.: 50,886

[22] Filed: **Apr. 21, 1993**

[51] **Int. Cl.<sup>6</sup>** ..... **H04K 1/00**

[52] **U.S. Cl.** ..... 348/5.5; 380/10;  
380/23; 455/26.1; 348/2

[58] **Field of Search** ..... 348/5.5, 2; 380/10,  
380/16, 23; 307/202.1; 455/26.1; 368/9

[56] **References Cited**

## U.S. PATENT DOCUMENTS

2,855,993	10/1958	Rahmel .....	368/9
3,126,513	3/1964	Kamen .	
3,483,327	12/1969	Schwartz .....	455/2
3,879,332	4/1975	Leone .....	348/5.5 X
3,947,624	3/1976	Miyake .	
4,058,829	11/1977	Thompson .	
4,348,696	9/1982	Beier .....	348/5.5 X
4,718,107	1/1988	Hayes .....	455/26.1 X
4,816,904	3/1989	McKenna et al. .	
4,912,552	3/1990	Allison et al. .	

4,956,825	9/1990	Wilts .....	368/9
4,985,761	1/1991	Adams .	
5,051,837	9/1991	McJunkin .....	348/5.5 X
5,168,372	12/1992	Sweetser .....	348/5.5
5,191,231	3/1993	Berry .....	307/202.1

*Primary Examiner*—Tod R. Swann

*Attorney, Agent, or Firm*—Eugene L. Flanagan, III;  
Curtis, Morris & Safford

[57] **ABSTRACT**

A method and system for automatically qualifying a signal reproduction device for installation of monitoring equipment. In a household in which viewing patterns are to be monitored, for example, a relatively inexpensive and simple set usage device is installed in proximity to a television set which is expected to receive little or no use. Times when the set is in use are sensed, and data concerning those times are stored and transmitted to a central location. At the central location, the times represented by the transmitted data are compared to a minimum usage threshold, and a more sophisticated monitoring device, able to detect the channel tuning state of the T.V. set, is installed in proximity to the T.V. set only if the usage of the T.V. set exceeds the minimum usage threshold. The number of relatively expensive and complex tuning-monitoring devices required to be installed is thereby reduced.

**29 Claims, 3 Drawing Sheets**

